

20020508.qrp v02_n549.qrl.20020508

Date: Wed, 8 May 2002 19:03:07 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 2549

QRP-L Digest 2549

Topics covered in this issue include:

- 1) [126304] Re: MFJ 9040, now only QRPp?
by "Bill Jones" <kd7s@psnw.com>
- 2) [126305] Re: New rig in town...soon...
by Bill ROWLETT <kc4atu@yahoo.com>
- 3) [126306] LOBSTERCON 2002 July 6 and 7th???
by "Rex Harper" <w1rex@megalink.net>
- 4) [126307] Re: What NOT to buy at Dayton
by "Brad Hernlem" <alihernlem@hotmail.com>
- 5) [126308] Re: MFJ 9040, now only QRPp?/Reply
by IamSF5@aol.com
- 6) [126309] Re: warranty
by Tom Feeny <tfeeny@comcast.net>
- 7) [126310] Re: Diode Ring Mixer Level
by "Leon Heller" <leon_heller@hotmail.com>
- 8) [126311] Re: What NOT to buy at Dayton
by Rick McKee <kc8aon@juno.com>
- 9) [126312] Re: What NOT to buy at Dayton
by aluscre <aluscre@neo.rr.com>
- 10) [126313] HB: A/D selection
by "Tracy Markham" <tracy@bytemark.com>
- 11) [126314] FDI-2002 Vendor's Night
by "w8diz" <w8diz@fpqrp.com>
- 12) [126315] follow up on what not to buy at Dayton
by PDouglas12@aol.com
- 13) [126316] RE: Diode Ring Mixer Level
by Howard Rubin <hrubin1970@comcast.net>
- 14) [126317] RE: Diode Ring Mixer Level
by Howard Rubin <hrubin1970@comcast.net>
- 15) [126318] RE: Pacemaker/defibrillator and RF
by Nick Kennedy <nkennedy@tcinternet.com>
- 16) [126319] Re: Argonaut V alert!
by brickle <brickle@pobox.com>
- 17) [126320] Re: FDI '02 or Bust! QRP Bicycle Mobile
by "Henry Freedenberg" <henryf@quartz.gly.fsu.edu>
- 18) [126321] Re: What NOT to buy at Dayton
by "Dave Fifield" <dave@redhotradio.com>
- 19) [126322] PCB board paddle

- by Steven Weber <kd1jv@moose.ncia.net>
- 20) [126323] RE: PCB board paddle
by Mark Schoonover <schoon@amgt.com>
- 21) [126324] Re: What NOT to buy at Dayton
by "Richard Brummer, K2JQ" <k2jq@rcn.com>
- 22) [126325] Re: New rig in town...soon...
by "Dave Fifield" <dave@redhotradio.com>
- 23) [126326] MFJ-259 B (correction)
by "Ingo, DK3RED" <dk3red@t-online.de>
- 24) [126327] Re: Diode Ring Mixer Level
by "Ingo, DK3RED" <dk3red@t-online.de>
- 25) [126328] Re: A/D selection
by "Ian Wilson" <ianmwilson@earthlink.net>
- 26) [126329] What's wrong with 950 mA on Receive?
by "Karl Kanalz" <kkanalz@gceciisp.com>
- 27) [126330] Re: Pacemaker/defibrillator and RF
by adamvaz@palm.net (Adam Vazquez)
- 28) [126331] Re: PCB board paddle
by "John Dorson" <jdorson@Worldshare.net>
- 29) [126332] Re: Diode Ring Mixer Level
by "w8diz" <w8diz@fpqrp.com>
- 30) [126333] Re: A/D selection
by "Mike Yetsko" <myetsko@insydesw.com>
- 31) [126334] Re: New rig in town...soon...
by "Jeff Davis" <n9avg@att.net>
- 32) [126335] Re: What NOT to buy at Dayton
by Bruce Muscolino <w6toy@erols.com>
- 33) [126336] Re: What NOT to buy at Dayton
by "Michael C. Boatright" <ko4wx@mindspring.com>
- 34) [126337] Re: QRP U.P.R.O.A.R. Project
by Tim ORourke <TORourke@KaiserFT.com>
- 35) [126338] Re: HB: A/D selection
by David Hinerman <WD8CIV@worldnet.att.net>
- 36) [126339] Re: What NOT to buy at Dayton
by David Hinerman <WD8CIV@worldnet.att.net>
- 37) [126340] Re: What's wrong with 950 mA on Receive?
by W2AGN <w2agn@w2agn.net>
- 38) [126341] Re: LOBSTERCON 2002 July 6 and 7
by "ss lyon" <sslyon@megalink.net>
- 39) [126342] RE: New rig in town...soon...
by "Lee, Jimmy" <Jimmy.Lee@bartow.k12.ga.us>
- 40) [126343] Re: What's wrong with 950 mA on Receive?
by "Paul Christensen" <w9ac@arrl.net>
- 41) [126344] Re: New rig in town...soon...
by "Jeff Davis" <n9avg@att.net>
- 42) [126345] Re: HB: A/D selection
by geoff allsup <gallsup@whoi.edu>
- 43) [126346] Re: Rigs for sale

by "Craig A. Ferris" <cferris@aeronix.com>
44) [126347] Current Draw
by W2AGN <w2agn@w2agn.net>
45) [126348] Re: New rig in town...soon...
by W2AGN <w2agn@w2agn.net>
46) [126349] Re: [126244] Having another look at the antenna situation...
by Dan Halbert <halbert@bbn.com>
47) [126350] Leave late for best deals
by "Scott Rosenfeld [N7JI]" <ham@w3eax.umd.edu>
48) [126351] Re: What's wrong with 950 mA on Receive?
by Ed Lawson <k1vp@grizzly.com>
49) [126352] RE: Diode Ring Mixer Level
by "Ed Tanton" <n4xy@earthlink.net>
50) [126353] Results NEQRP SSB NET
by "Ronald A Pfeiffer" <Ronald_A_Pfeiffer@raytheon.com>
51) [126354] Re: What NOT to buy at Dayton
by "Randy Randall" <randallr@Healthall.com>
52) [126355] Re: What's wrong with 950 mA on Receive?
by brickle <brickle@pobox.com>
53) [126356] RE: Leave late for best deals
by Mark Schoonover <schoon@amgt.com>
54) [126357] Re: What's wrong with 950 mA on Receive?
by "Dave Fifield" <dave@redhotradio.com>
55) [126358] Re: What NOT to buy at Dayton
by "James P. Osburn, P.E." <j.p.osburn@ieee.org>
56) [126359] Re: HB: A/D selection
by "Leon Heller" <leon_heller@hotmail.com>
57) [126360] RE: HB: A/D selection
by "Tracy Markham" <tracy@bytemark.com>
58) [126361] Re: What NOT to buy at Dayton
by "Harold Smith" <harold.smith1@worldnet.att.net>
59) [126362] RE: HB: A/D selection
by David Hinerman <WD8CIV@worldnet.att.net>
60) [126363] Re: What's wrong with 950 mA on Receive?
by "Charles Mabbott" <aa8vs@msn.com>
61) [126364] Re: What's wrong with 950 mA on Receive?
by "Charles Mabbott" <aa8vs@msn.com>
62) [126365] Re: HB: A/D selection
by "Mike Yetsko" <myetsko@insydesw.com>

Date: Tue, 7 May 2002 13:59:34 -0700
From: "Bill Jones" <kd7s@psnw.com>
To: <ke3fl@yahoo.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [126304] Re: MFJ 9040, now only QRPp?
Message-ID: <000901c1f60a\$179ee640\$9110010a@fresno>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Phil,

Are you measuring the battery voltage key-down? If your battery is only reading 12.4 volts it is fairly well down the discharge curve or is under-rated for the load.

=====
Bill Jones - <><
Sanger, California

=====
----- Original Message -----
From: "Philip Karras" <ke3fl@yahoo.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Tuesday, May 07, 2002 12:33 PM
Subject: MFJ 9040, now only QRPP?

> I had a very nice QSO last night using my solar
> charged battery and MFJ-9040. However, I noticed that
> it was only putting out 1W at 12.4V.

Date: Tue, 7 May 2002 14:10:16 -0700 (PDT)
From: Bill ROWLETT <kc4atu@yahoo.com>
To: duffyb01@fuse.net,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [126305] Re: New rig in town...soon...
Message-ID: <20020507211016.85866.qmail@web14207.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

With the price being 795, I stoped for just a second.
Will order tonight. Why?

1. Its a Ten Tec, good service and user support.
2. Sofeware defined, if 60 meters is allocated,
download and you are ready to go.
3. 35 IF DSP filters

4. Plug and play PSK31 and other sound card using modes

5. Same features on the K2 will run total over 1,000, and you put it together.

Okay, its not a portable radio and it does not have 2,6, or 70cm bands as does the FT718. I have separate 6 and 2 meter rigs, and other portable rigs. Need good rig for the shack. The 516 wins hands down.

Give it some thought, 35 filters and download flash roam for upgrades plus the plug and play PSK31 for 795 an't bad.

No connection with Ten Tec, just a fan.

73, Bill kc4atu

Do You Yahoo!?

Yahoo! Health - your guide to health and wellness
<http://health.yahoo.com>

Date: Tue, 7 May 2002 17:01:19 -0400
From: "Rex Harper" <w1rex@megalink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [126306] LOBSTERCON 2002 July 6 and 7th???
Message-ID: <004501c1f60a\$57247f00\$553ca43f@stickfarmers>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

QRP gang,

I am making arrangements for the upcoming LOBSTERCON 2002! This is a HIGHLY informal format where a bunch of QRPers from northern New England get together to meet each other, swap stories, show & tell, possibly exchange PRICELESS ANTIQUE ELECTRONIC EQUIPMENT and PARTS (for measley amounts), operate their rigs, and EAT LOBSTER. QRPers from southern New England and beyond are also encouraged to attend if they happen to be in the area. Our last LOBSTERCON took place in Fort Williams Park in Cape Elizabeth, Maine. It was a beautifull day and lobster and much fun was had by all. A new wrinkle will possibly added this year, CAMPING! The potential site for this

years LOBSTERCON is Thomas Point Beach & Campground in Brunswick/Bath Maine. I have made tentative arrangements with them to hold our livey soiree in their facilities on the weekend of July 6th and 7th. They have a great group campsite nestled in the TALL (if I remember correctly) trees. Camping fee is 6 bucks per person and lobster fee depends on how many you want to eat..... If I don't have enough interest in the camping, then we will probably return to Ft. Williams Park.

I would like to get a feel for who might come....so if you would kindly E me of your interest,
I would appreciate it.

OBTW, a surprise mystery guest from Dos someplace has already indicated his interest in attending.

72,

W1REX Rex Harper "The Tinman"

Date: Tue, 07 May 2002 21:23:45 +0000
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: kd1jv@moose.ncia.net
Cc: qrp-1@lehigh.edu
Subject: [126307] Re: What NOT to buy at Dayton
Message-ID: <F521SoeBBQk5qAE1Ang00010538@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Steven Weber (kd1jv@moose.ncia.net) sayeth:

>Rule of thumb for any flea market:

>Arrive early for best selection, leave late for best deals.

The early bird may also get the worm and not just the best selection, especially when it lies in the back of a pickup with a sign that reads "FREE
- Donations welcome".

Deals are not restricted to late in the day. Some people come to swapmeets just to jump their stuff somewhere other than the landfill.

Brad (always there when the gates open)

Chat with friends online, try MSN Messenger: <http://messenger.msn.com>

Date: Tue, 7 May 2002 18:03:56 EDT
From: IamSF5@aol.com
To: ke3fl@yahoo.com, qrp-1@lehigh.edu
Subject: [126308] Re: MFJ 9040, now only QRPp?/Reply
Message-ID: <11c.10cfb088.2a09a94c@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

In a message dated 5/7/02 4:00:35 PM Eastern Daylight Time, ke3fl@yahoo.com writes:

<<

I had a very nice QSO last night using my solar charged battery and MFJ-9040. However, I noticed that it was only putting out 1W at 12.4V.

>>

Are you saying that the board voltage is 12.4 or is that what your running from?

Check that voltage regulator pot on the board.

Those plastic pots at times can really drive you nuts.

Theres a test point right next to the pot and if you have the 12.4 on the board then I guess it's time to look at the driver stage or maybe the final since you still have a full 1 watt.

Let me know how you make out.

I back mine off to 4 watts into a dummy load.

72

Bob

AF2Q

Date: Tue, 07 May 2002 18:06:24 -0400
From: Tom Feeny <tfeeny@comcast.net>
To: *QRP-L <qrp-1@Lehigh.EDU>
Subject: [126309] Re: warranty
Message-ID: <000401c1f613\$75bb3860\$39543e44@waldlk01.mi.comcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=Windows-1252
Content-transfer-encoding: 7BIT

There was some discussion about installation of filters in a FT-817.
I got the following answer from Vertex (Yaesu). I just ordered one. :)))

> Hello Tom
> I don't know why installing filters in your radio will void the warranty.
> You can put anything you want in your radio without voiding the warranty.
> The only way you can void it is to damage the radio in some way by
> installing the filters or doing something else with the radio.
> So to answer your question, No, the warranty will still be valid
> if you install the filters in the FT-817.
> Best Regards,
> Jerry Darby, N6UME
> Technical Support
> Amateur Products Division
> Vertex Standard USA
> j.darby@vxstdusa.com

Date: Tue, 07 May 2002 22:14:11 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: alihernlem@hotmail.com, qrp-1@Lehigh.EDU
Subject: [126310] Re: Diode Ring Mixer Level
Message-ID: <F30gzCRoJUGYhborQJN0000fd3a@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: "Brad Hernlem" <alihernlem@hotmail.com>
>Reply-To: alihernlem@hotmail.com
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Diode Ring Mixer Level
>Date: Tue, 07 May 2002 20:02:07 +0000
>
>Question:
>
>If one possesses a diode ring mixer but lacks the specifications, what can
>one do (if anything) to determine its proper operating "level"?

Measuring the conversion loss at different LO drive levels would probably
work.

Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

My low-cost Altera Flex design kit: <http://www.leonheller.com>

MSN Photos is the easiest way to share and print your photos:

<http://photos.msn.com/support/worldwide.aspx>

Date: Tue, 7 May 2002 18:13:46 -0400

From: Rick McKee <kc8aon@juno.com>

To: qrp-1@Lehigh.EDU

Subject: [126311] Re: What NOT to buy at Dayton

Message-ID: <20020507.184415.8854.3.kc8aon@juno.com>

To All Dayton Patrons !

Taking the lid off the equipment you are interested in buying is very sound advice ! A friend of mine bought a very nice looking HF rig at Dayton a few years back for \$400, the thing looked pretty sharp and the seller swore that it worked top notch too. Well when he got it home and hooked it up it wouldn't even light up, so he took the lid off to see if he could find something obvious and sure enough he did ! the only thing that was left in the cabinet besides the boards that held the front and rear panel controls was a plain old brick ! Another friend of mine bought a Heathkit tuner (SA-2040 1.5kw) which is usually a very nice tuner except someone had robbed the original capacitors and installed ones that might have handled 25 watts at the most ! And recently at a local hamfest, I was looking at a tuner and asked the owner if I could pop the lid and take a look and he refused and got mad at me for asking. So I questioned him if it had ever been arched and he replied that it hadn't. So I stated that he shouldn't mind me taking a look inside and he still refused. So I walked away with my money still safely tucked away in my pocket. Another friend of mine bought a tuner at a hamfest and when he got it home he found that the swr meter circuit was missing - the meter was there but no circuit for it and the seller assured him that it all worked like new.

So, take a small set of screwdrivers, a small volt ohm meter, a small gel cell battery with clip leads, and a small flashlight ! You can't be too careful with all the thieves that hang out in these places these days !

Rick McKee, KC8AON
Willow Wood, Ohio
QRP - Do more with less !

GET INTERNET ACCESS FROM JUNO!

Juno offers FREE or PREMIUM Internet access for less!
Join Juno today! For your FREE software, visit:
<http://dl.www.juno.com/get/web/>.

Date: Tue, 07 May 2002 18:48:30 -0400
From: aluscre <aluscre@neo.rr.com>
To: pwomble1@tampabay.rr.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [126312] Re: What NOT to buy at Dayton
Message-ID: <200205072248.g47MmMg03972@clmboh1-smtp3.columbus.rr.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> Paul Womble wrote:
>That's all part of the game. Funny how the weather can change the rules.
> Rain = low prices!....

In my 20 years of Daytons (15 or 16 selling) I would like to debunk the rain=low prices myth. Actually as a seller I have found that a wet Friday and Saturday actually drives up prices. Hamfesters have traveled far and anticipated Dayton for weeks and if they were stymied by bad weather they will be very eager to buy something!

Rain does drop prices on fragile or paper items which incur damage. But that 2M mobile that I have kept dry for two days usually gets a higher price after days of rain. Items in good condition sold by a patient seller usually bring good prices and a satisfied customer when they get home and fire up the equipment. Junk and poorly handled equipment, missing parts or manuals and "make a quick buck sellers" often leave buyer with a momentary joy over the great deal he made but often end in sour mood when they get it home and it doesn't....

By the way stop by my spot #3811 and say hi.

--

|-----|
Anthony A. Luscre
K8ZT
Stow, Ohio
|-----|
Visit My Website at
<http://www.qsl.net/k8zt>
|-----|

Date: Tue, 7 May 2002 16:39:37 -0700
From: "Tracy Markham" <tracy@bytemark.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [126313] HB: A/D selection
Message-ID: <NFBBKLDHALEHCJMAJPKFOEBGDBAA.tracy@bytemark.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I fancy using an analog to digital converter to monitor the AGC voltage in the IF amp of my computer QRP radio. (on topic, right??)

I have no clue how to select an A/D converter ... I know I don't need but one channel for that, I know I don't need a million samples per second, but I don't know how to determine the sensitivity and accuracy, if ADC's are rated that way ...

The voltage on an AGC line (Hayward, 'A progressive receiver,' late 80's early 90's handbooks ...) should be about .5 - 10 V shouldn't it? So I guess I'd need an A/D converter that can handle that range.

Am I barking up the right tree?
Tracy N4LGH

Date: Tue, 7 May 2002 20:06:31 -0400
From: "w8diz" <w8diz@fpqrp.com>
To: <qrp-l@Lehigh.EDU>
Subject: [126314] FDIM-2002 Vendor's Night
Message-ID: <000901c1f624\$354674f0\$39d81b41@cinci.rr.com>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All,

This is the last formal call for VENDOR's and CLUB night.
So far we have 13 registered groups for Friday night.
If your group/club/organization would like a table set up
for Friday night, please email me and I will make sure that
you have setups for the event.

If any of you have special requirements, like 117 VAC POWER
water, gas or phone hookup, just let me know.

I hear the Cheeseheads and the Flying Pigs are providing
munchies and eats, so you don't want to miss out.

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio
Clermont County - EM79uf - near Cincinnati; 39.218N - 84.305W
SOC-8 DLQRPAG-1454 ARCI-10226 ARS-781 QRPL-1998 10X-9389 CATT-26
FP#-1 <http://home.cinci.rr.com/w8diz> & <http://kitsandparts.com>

Date: Tue, 7 May 2002 20:07:43 EDT
From: PDouglas12@aol.com
To: qrp-l@lehigh.edu
Subject: [126315] follow up on what not to buy at Dayton
Message-ID: <d6.163841c5.2a09c64f@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Gang,

I was having so much fun writing the last posting about not buying QRP rigs
at Dayton, I neglected to mention how you should buy one there, if you are
really looking for a good rig. Come to one of the FDIM events and meet you
fellow QRPers over at the Ramada. You may find one of the very rigs you seek
from another genuine, honest QRPPer. No, you won't get the steal of the
century, because the owner is likely to know the value of a well-preserved
QRP rig; but you will be much less likely to be taken. Heck, the seller has
a reputation to preserve in this tight-knit group. So, if you see something
for sale at one of the evening activities, that might be what you are looking

for. But do be careful out in the big parking lot over at the Hamvention.

72,

Preston WJ2V

Date: Tue, 07 May 2002 20:15:38 -0400
From: Howard Rubin <hrubin1970@comcast.net>
To: alihernlem@hotmail.com
Cc: qrp-1@lehigh.edu
Subject: [126316] RE: Diode Ring Mixer Level
Message-ID: <NGBBIJLJALHNLHMDICMPOEAMCFAA.hrubin1970@comcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

Brad,

Specifications are generally available on the web. Do a google search and just enter the model number of the mixer and it will probably be found in a list of potential references.

If all else fails, I would try the following levels.

Local Oscillator 7dBm
RF input -10 dBm
If output -18 dBm

The dBm is a measure of power relative to 1 mW, and specified at some terminating impedance. The impedance of many diode ring mixers is 50 ohms, so 7 dBm is 500mVRMS, -10dBm is 70 mVRMS and -18 dBm is about 28 mVRMS. You will likely require amplifiers or attenuators to drive these ports. Check the ARRL handbook for additional information on DBM (double balanced mixers).

$\text{dBm} = 10 \log [P/.001]$, where P is in mW.

I just completed a design using 2N2222A's as wide band amplifiers! They are still good to 10 MHz and beyond.

As usual, the story unfolds in many chapters of the book, but it is all there. Persistence is the key to success. I'd be interested to hear from others in the group with their experiences using diode ring mixers.

Hope this helps, Howard Rubin, N3FEL

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Brad Hernlem

Sent: Tuesday, May 07, 2002 4:02 PM

To: Low Power Amateur Radio Discussion

Subject: Diode Ring Mixer Level

Question:

If one possesses a diode ring mixer but lacks the specifications, what can one do (if anything) to determine its proper operating "level"?

Brad

MSN Photos is the easiest way to share and print your photos:

<http://photos.msn.com/support/worldwide.aspx>

Date: Tue, 07 May 2002 20:31:07 -0400

From: Howard Rubin <hrubin1970@comcast.net>

To: alihernlem@hotmail.com

Cc: qrp-l@lehigh.edu

Subject: [126317] RE: Diode Ring Mixer Level

Message-ID: <NGBBIJLJALHNLHMDICMPIEANCFAA.hrubin1970@comcast.net>

MIME-version: 1.0

Content-type: text/plain; charset=iso-8859-1

Content-transfer-encoding: 7BIT

Brad and others,

Correction:

$\text{dBm} = 10 \log [P/.001]$, where P is in WATTS.

$V_{\text{rms}} = \sqrt{[(10^{(\text{dBm}/10)}) * 0.001 * R]}$, where V_{rms} is in VOLTS.

Howard

-----Original Message-----

From: Howard Rubin [mailto:hrubin1970@comcast.net]

Sent: Tuesday, May 07, 2002 8:16 PM

To: alihernlem@hotmail.com

Cc: qrp-l@lehigh.edu

Subject: RE: Diode Ring Mixer Level

Brad,

Specifications are generally available on the web. Do a google search and just enter the model number of the mixer and it will probably be found in a list of potential references.

If all else fails, I would try the following levels.

Local Oscillator 7dBm

RF input -10 dBm

If output -18 dBm

The dBm is a measure of power relative to 1 mW, and specified at some terminating impedance. The impedance of many diode ring mixers is 50 ohms, so 7 dBm is 500mVRMS, -10dBm is 70 mVRMS and -18 dBm is about 28 mVRMS. You will likely require amplifiers or attenuators to drive these ports. Check the ARRL handbook for additional information on DBM (double balanced mixers).

$\text{dBm} = 10 \log [P/.001]$, where P is in mW.

I just completed a design using 2N2222A's as wide band amplifiers! They are still good to 10 MHz and beyond.

As usual, the story unfolds in many chapters of the book, but it is all there. Persistence is the key to success. I'd be interested to hear from others in the group with their experiences using diode ring mixers.

Hope this helps, Howard Rubin, N3FEL

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of

Brad Hernlem

Sent: Tuesday, May 07, 2002 4:02 PM

To: Low Power Amateur Radio Discussion

Subject: Diode Ring Mixer Level

Question:

If one possesses a diode ring mixer but lacks the specifications, what can one do (if anything) to determine its proper operating "level"?

Brad

MSN Photos is the easiest way to share and print your photos:
<http://photos.msn.com/support/worldwide.aspx>

Date: Tue, 7 May 2002 19:53:25 -0500
From: Nick Kennedy <nkennedy@tcainternet.com>
To: "'wa0goz@arrl.net'" <wa0goz@arrl.net>,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [126318] RE: Pacemaker/defibrillator and RF
Message-ID: <01C1F600.DB02A0E0.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

No first hand experience.

If you evaluate the device precautions, discuss with your doctor, and decide it's OK to go on the air, you might consider additional precautions to minimize RF in the shack ---

Use a balanced antenna--dipole or beam; not a longwire or similar.
Use a choke balun on the coax in the shack.
Have the antenna out and away from the shack. Not right above you.
Maybe a field strength meter on the desk would be good to tell you something's gone out of balance.
As someone else said, run QRP.

72 & GL--

Nick, WA5BDU

-----Original Message-----
From: wa0goz@arrl.net [SMTP:wa0goz@arrl.net]
Sent: Monday, May 06, 2002 9:56 PM
To: Low Power Amateur Radio Discussion
Subject: Pacemaker/defibrillator and RF

Seem's I'm going to have to have a pacemaker/defibrillator put in. In the booklets they gave me, it says to stay away from ham radio. Anyone have first hand experience with this?

Thanks and 73,

Henry WA0GOZ

Date: Tue, 07 May 2002 22:46:43 -0400
From: brickle <brickle@pobox.com>
To: qrp-1@Lehigh.EDU
Subject: [126319] Re: Argonaut V alert!
Message-ID: <3CD89193.D341485B@pobox.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

950 mA on rx?!?

73
Frank
AB2KT

Date: Tue, 7 May 2002 22:45:26 -0400
From: "Henry Freedenberg" <henryf@quartz.gly.fsu.edu>
To: qrp-1@lehigh.edu
Subject: [126320] Re: FDIS '02 or Bust! QRP Bicycle Mobile
Message-ID: <3CD85906.28820.32174F@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

"...With glowing hearts, we see the rise, the true north strong and
free....."

On 7 May 2002 at 5:50, VE3JC - John C wrote:

> Well we had so much fun last year that we just HAVE to do it again

Date: Tue, 7 May 2002 20:30:16 -0700
From: "Dave Fifield" <dave@redhotradio.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [126321] Re: What NOT to buy at Dayton
Message-ID: <001901c1f640\$ac418740\$0200a8c0@AD6A>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Caveat emptor.

There's an awful lot of complete junk being sold at Dayton to the unsuspecting. The years I have been there, I saw many supposedly good items being flogged for too high prices to people who apparently didn't know what a fair price was or weren't wary enough about the item working/not working properly.

Unlike your local monthly swapmeet, the sellers at Dayton know that there isn't another opportunity until next year for you to catch up with them, and a lot of them do indeed use this fact to their advantage. There is a lot of preying on the innocent IMO and not many real bargains to be had at all.

I actually gave up on the outside swap the last time I went, and concentrated on the indoor vendors and new stuff. IMO, I get much better deals at my local swaps. For example, last weekend at the Livermore monthly swap (before the NorCal meeting) I scored 15,000 feet of silver plated copper teflon coated 24awg multistranded wire in solid colors (every color except white which I have already!)...all brand new on the reels (albeit a little dusty)for \$35....now that's what I call a bargain! You will never get a deal like that at Dayton IMO.

Cheers es 72,
Dave F.
AD6A

P.S. Anyone remember a few years back when the Feds swept the Dayton swap and hauled all the pirate satellite dealers off to jail?

Date: Wed, 08 May 2002 00:20:18 -0400
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [126322] PCB board paddle

Message-ID: <3.0.6.32.20020508002018.0079d6c0@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Gang,

Hi Gang,

Today, I made a small, very light weight (0.8 Oz, with cable and plug) paddle out of scrap pcb matterial. The results suprired me. It's very responsive and easy to use. Works so well, I drew up the plans and made a scan of the finsihed product and put it up on my web page. I made it a bit differently then other pcb paddles you might have seen, so check it out.

<http://www.qsl.net/kd1jv/pcbpaddle.HTM>

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Tue, 7 May 2002 22:09:33 -0700
From: Mark Schoonover <schoon@amgt.com>
To: "'kd1jv@moose.ncia.net'" <kd1jv@moose.ncia.net>,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [126323] RE: PCB board paddle
Message-ID: <BF889CEBEFD2D511B993009027F60ABE1556E3@AG-JASMINE-NT4>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

QST did a simular paddle that I made a couple of years ago. It's a single lever version, pretty much made the same way as yours. Feels pretty good, but it doesn't work very well above 25 wpm. I use mine with an external TiCK 4 keyer, and an SW40+ while out on vacation. Whole setup travels and works nicely....

72
.mark

===={-----Original Message-----
===={From: Steven Weber [mailto:kd1jv@moose.ncia.net]
===={Sent: Tuesday, May 07, 2002 9:20 PM
===={To: Low Power Amateur Radio Discussion

--=={Subject: PCB board paddle
--=={
--=={
--=={Hi Gang,
--=={
--=={Hi Gang,
--=={
--=={Today, I made a small, very light weight (0.8 Oz, with
--=={cable and plug)
--=={paddle out of scrap pcb matterial. The results supriised
--=={me. It's very
--=={responsive and easy to use. Works so well, I drew up the
--=={plans and made a
--=={scan of the finsihed product and put it up on my web page.
--=={I made it a bit
--=={differently then other pcb paddles you might have seen, so
--=={check it out.
--=={
--=={http://www.qsl.net/kd1jv/pcbpaddle.HTM
--=={
--=={
--=={72,
--=={Steve, KD1JV
--=={"Melt Solder"
--=={White Mountains of New Hampshire
--=={http://www.qsl.net/kd1jv/
--=={
--=={

Date: Wed, 8 May 2002 01:11:33 -0400
From: "Richard Brummer, K2JQ" <k2jq@rcn.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [126324] Re: What NOT to buy at Dayton
Message-ID: <02d101c1f64e\$d24b0b60\$0300a8c0@dad-s-computer.rcn.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Reminds me of one of the times I went to the hamfest in Rochester, NY. I was checking out a large box with about 100 tubes, each in their original box. As I opened each box, I found out that I would have been buying a boxful of tube boxes.

I just smiled at the seller, he smiled back, and I moved on.

Dick K2JQ

-----Original Message-----

From: Rick McKee <kc8aon@juno.com>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Date: Wednesday, May 08, 2002 12:17 AM

Subject: Re: What NOT to buy at Dayton

> Taking the lid off the equipment you are interested in buying is very
> sound advice !

Date: Tue, 7 May 2002 22:33:44 -0700

From: "Dave Fifield" <dave@redhotradio.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [126325] Re: New rig in town...soon...

Message-ID: <006c01c1f651\$eb9c08a0\$0200a8c0@AD6A>

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

I rather like the look and specs of the new TenTec Orion transceiver. It sounds like they have combined the best of everything with crystal filters in the first IF and a super-DSP lower down the chain.

I wonder if the LCD is color or just cream spinich?

Cheers es 72,

Dave F.

AD6A

Date: Wed, 08 May 2002 07:34:24 +0200

From: "Ingo, DK3RED" <dk3red@t-online.de>

To: GQRP <qgrp@yahooogroups.com>, QRP-L <qrp-l@lehigh.edu>

Subject: [126326] MFJ-259 B (correction)

Message-ID: <3CD8B8E0.E2D3324A@t-online.de>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hello QRPer,

the correct URL for the calibration procedure is
<http://www.qsl.net/dk3red/mfj259-cal.pdf> .
SRI for the typo and TNX to Jim in AL and Karl in TX for the note.

--

72/73 de Ingo, DK3RED Don't forget: the fun is the power!
dk3red@t-online.de <http://www.qsl.net/dk3red>
DL-QRP-AG #824 <http://www.dl-qrp-ag.de>

Date: Wed, 08 May 2002 07:48:25 +0200
From: "Ingo, DK3RED" <dk3red@t-online.de>
To: QRP-L <qrp-l@lehigh.edu>
Subject: [126327] Re: Diode Ring Mixer Level
Message-ID: <3CD8BC29.B67F5626@t-online.de>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello Brad,

> If one possesses a diode ring mixer but lacks the specifications, what can
> one do (if anything) to determine its proper operating "level"?

Short data sheets from different mixers are available on
<http://www.Mini-Circuits.com/mixer.html> .

--

72/73 de Ingo, DK3RED Don't forget: the fun is the power!
dk3red@t-online.de <http://www.qsl.net/dk3red>
DL-QRP-AG #824 <http://www.dl-qrp-ag.de>

Date: Tue, 7 May 2002 23:59:40 -0700
From: "Ian Wilson" <ianmwilson@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [126328] Re: A/D selection
Message-ID: <002301c1f65d\$ecd41d00\$0b02a8c0@0020115492>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> I fancy using an analog to digital converter to monitor the AGC voltage in
> the IF amp of my computer QRP radio. (on topic, right??)
>
> I have no clue how to select an A/D converter ... I know I don't need but
> one channel for that, I know I don't need a million samples per second,
but
> I don't know how to determine the sensitivity and accuracy, if ADC's are
> rated that way ...

I would imagine that since AGC is mostly for humans, that sampling at a rate
of 10 per second would be more than adequate. Probably your sample rate
will
be determined by whatever s/w is talking to your radio.

You won't find anything as slow as this, so pick something that isn't too
expensive. The sort of A/D specs similar to the A/Ds built in to PICs would
be
what you would want. 8 bits of accuracy will be plenty. You will want to
decide whether to look for an A/D with a parallel or serial interface.
Since you
presumably have some kind of bus in your Rx already, it's probably easier to
use
parallel.

I'd look at Analog Devices, Maxim, etc for parts (or, better, start in the
DigiKey
catalog so you can screen out anything more than a few bucks).

>
> The voltage on an AGC line (Hayward, 'A progressive receiver,' late 80's
> early 90's handbooks ...) should be about .5 - 10 V shouldn't it? So I
guess
> I'd need an A/D converter that can handle that range.

Depends somewhat on your power rails. You might want to look at an A/D with
a full scale of 0-5v, and put a voltage divider in front of it.

>
> Am I barking up the right tree?
> Tracy N4LGH
>

Hope this helps,

--ian k3imw/6

Date: Wed, 8 May 2002 04:31:14 -0500
From: "Karl Kanalz" <kkanalz@gcecisp.com>
To: <brickle@pobox.com>,
 "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [126329] What's wrong with 950 mA on Receive?
Message-ID: <NFBBKOMEFGJGEBABODPOAECOCDA.kkanalz@gcecisp.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

Frank,
I see nothing wrong with the Argonaut V receive power consumption.
This is, after all, a "home station" rig and really isn't intended to be
used
in the field from battery power.

Don't forget there is a complicated synthesizer and other power-hungry
stuff in that box - not conducive to low power consumption. Look at the
receive power consumption of other radios that are designed for home
(base?) use - the iCOM 756 Pro, the Yaesu FT-1000D and so on.

Karl K - W8TIF
McKinney, Texas

-----Original Message-----

From: brickle
Sent: Tuesday, May 07, 2002 9:47 PM
To: Low Power Amateur Radio Discussion
Subject: Re: Argonaut V alert!

950 mA on rx?!?

73
Frank
AB2KT

Date: Wed, 08 May 2002 05:46:12 -0400

From: adamvaz@palm.net (Adam Vazquez)
To: wa0goz@arrl.net, qrp-1@Lehigh.EDU
Subject: [126330] Re: Pacemaker/defibrillator and RF
Message-ID: <20020508094612.E2E23450C@mo110uhou.palm.net>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

wa0goz@arrl.net wrote on 5/6/02 10:55 pm:

>Seem's I'm going to have to
>have a
>pacemaker/defibrillator put
>in. In
>the booklets they gave me,
>it says to stay away from
>ham radio. Anyone
>have first hand experience
>with this?

>
>Thanks and 73,
>
>Henry WA0GOZ
>
>

Hello de Adam Kb2Jpd and FDNY EMS

You are to have installed cardiac monitoring and correcting equipment in your body.

For some reason, the original pacemaker in your heart and conducive fibers are creating abnormalities. [look up AV NODE, 1ST DEGREE HEART BLOCK].

The equipment installation at first is identical to installing a pacemaker. The difference in the surgical procedure will be the additional placement of the 'paddles' for shocking the heart back into sinus rhythm. Should the defibrillator go off, activate EMS. Sometimes it will go off two or more times when sensing abnormalities. I have been told it is like been punched in the chest.

Besides moderate RF Fields(in excess of 100w HF/50W VHF/40W UHF), you must now be weary of old microwave ovens, active RF inventory control systems, old radar guns, industrial RF Heating/Sealing systems and any medical device emitting or using a intense electromagnetic field.

The buddy system with a knowledgeable companion will be a necessity at Field Day or any location close to above apparatus.

The documentation you have received was written for to offset legal liability.

Consult your doctor and the ARRL Technical Support regarding your concerns.

You wrote to the right group. QRP will be the way to go.

72/73 Adam Vazquez Kb2Jpd

Date: Wed, 8 May 2002 06:44:03 -0400
From: "John Dorson" <jdorson@Worldshare.net>
To: <kd1jv@moose.ncia.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [126331] Re: PCB board paddle
Message-ID: <003b01c1f67d\$49dc3e00\$c20ef343@atwork>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

STEVE I JUST LOOKED AT YOUR SITE AND WANTED TO SAY YOU DID A GREAT JOB IN BOTH YOUR CONSTRUCTION INFO AND THE PARTS DIAG.

THANKS.

JOHN K2JHU...

----- Original Message -----

From: "Steven Weber" <kd1jv@moose.ncia.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, May 08, 2002 12:20 AM
Subject: PCB board paddle

> Hi Gang,
>
> Hi Gang,
>
> Today, I made a small, very light weight (0.8 Oz, with cable and plug)
> paddle out of scrap pcb matterial. The results supriised me. It's very
> responsive and easy to use. Works so well, I drew up the plans and made a
> scan of the finsihed product and put it up on my web page. I made it a bit
> differently then other pcb paddles you might have seen, so check it out.
>
> <http://www.qsl.net/kd1jv/pcbpadddle.HTM>

>
>
> 72,
> Steve, KD1JV
> "Melt Solder"
> White Mountains of New Hampshire
> <http://www.qsl.net/kd1jv/>

Date: Wed, 8 May 2002 06:50:10 -0400
From: "w8diz" <w8diz@fpqrp.com>
To: <qrp-1@Lehigh.EDU>
Subject: [126332] Re: Diode Ring Mixer Level
Message-ID: <[004601c1f67e\\$233606e0\\$39d81b41@cinci.rr.com](mailto:004601c1f67e$233606e0$39d81b41@cinci.rr.com)>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

One possible way to determine if it is a high level mixer...
check the voltage drop across the diodes. Use the link below
<http://www.qrp.pops.net/images/dbm.gif>
measure voltage from from point 2b to 2b. Many high level
mixers use 2 diodes of each leg (total of 8 diodes)
The caveat is you need to know if the diodes are Schottky,
Hot-Carrier or common silicon such as 1N914/4148, but most
likely they are Schottky/Hot-Carrier.

Since you need current flow tru 2 diodes, if the the voltage
drop is near 0,6 volts then the mixer is most likely NOT
a high level mixer. If you see something OVER 1 volt then
you might assume that is IS a high lever mixer. Of course
we are assuming a Schottky diode.

Lot's of assumptions here <grin>. Good Luck!

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio
Clermont County - EM79uf - near Cincinnati; 39.218N - 84.305W
SOC-8 DLQRPAG-1454 ARCI-10226 ARS-781 QRPL-1998 10X-9389 CATT-26
FP#-1 <http://home.cinci.rr.com/w8diz> & <http://kitsandparts.com>

>From: "Brad Hernlem" <alihernlem@hotmail.com>
>Reply-To: alihernlem@hotmail.com
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Diode Ring Mixer Level
>Date: Tue, 07 May 2002 20:02:07 +0000

>
>Question:
>
>If one possesses a diode ring mixer but lacks the specifications, what can
>one do (if anything) to determine its proper operating "level"?

Date: Wed, 8 May 2002 06:57:43 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <tracy@bytemark.com>,
 "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [126333] Re: A/D selection
Message-ID: <004101c1f67f\$4b8d1060\$0200a8c0@charter.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well, first off you have to determine how you're going to interface.
That's
going to determine a lot too.

Personally, I've used the Dallas Semiconductor 1-wire A/D chip, it's kind
of neat.

And I've used the little TI part RS used to sell. It's serial with a
clock and
data line. But it does a good job.

Then there's the ADC0808 and ADC0809 part. Easy to interface to with
a parallel port. And you can easily configure it to different input
configurations. And it's 8 channels.... OK, It's really only one
channel,
but it has 8 selectable inputs. And you can pretty much use it without
any
input conditioning for most applications.

In any case, make sure the voltage you want to detect is carefully scaled
to the input range of the chip.

Mike

----- Original Message -----
From: "Tracy Markham" <tracy@bytemark.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, May 07, 2002 7:39 PM
Subject: HB: A/D selection

> I fancy using an analog to digital converter to monitor the AGC voltage
in
> the IF amp of my computer QRP radio. (on topic, right??)
>
> I have no clue how to select an A/D converter ... I know I don't need
but
> one channel for that, I know I don't need a million samples per second,
but
> I don't know how to determine the sensitivity and accuracy, if ADC's are
> rated that way ...
>
> The voltage on an AGC line (Hayward, 'A progressive receiver,' late 80's
> early 90's handbooks ...) should be about .5 - 10 V shouldn't it? So I
guess
> I'd need an A/D converter that can handle that range.
>
> Am I barking up the right tree?
> Tracy N4LGH
>
>
>

Date: Wed, 8 May 2002 06:04:56 -0500
From: "Jeff Davis" <n9avg@att.net>
To: <kc4atu@yahoo.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [126334] Re: New rig in town...soon...
Message-ID: <003301c1f680\$3093e490\$9800a8c0@N9AVG>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Bill,

Perhaps ... but once you buy the new TT rig you will have a TT rig.

When you get done with the Elecraft adventure you have a K2!

Its like the difference between owning a really nice print or owning

the masterpiece that inspired it.

;-)

72 de Jeff, N9AVG

----- Original Message -----

From: "Bill ROWLETT" <kc4atu@yahoo.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Tuesday, May 07, 2002 4:10 PM

Subject: Re: New rig in town...soon...

5. Same features on the K2 will run total over 1,000,
and you put it together.

Date: Wed, 08 May 2002 07:59:05 -0400

From: Bruce Muscolino <w6toy@erols.com>

To: dave@redhotradio.com

Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>

Subject: [126335] Re: What NOT to buy at Dayton

Message-ID: <3CD91309.CA15B6DE@erols.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

This stuff only makes it clear that we live in a larger world. Not everybody is your QRP buddy. As one writer said, any man who goes into a gunfight with his weapon in his holster only increases his chances that it will stay there! There is no excuse for not completely evaluating (to the greatest extent possible) what you intend to buy! It's your money.

73

Date: Wed, 08 May 2002 07:32:13 -0400

From: "Michael C. Boatright" <ko4wx@mindspring.com>

To: qrp-1@lehigh.edu

Subject: [126336] Re: What NOT to buy at Dayton

Message-ID: <5.0.2.1.2.20020508073100.0230fec0@pop.mindspring.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

My secret is to take Mike Branca, W3IRZ, with me in the bone yard. Sort of like having the museum director give you a tour of the museum.

72 de Mike, K04WX
Michael C. Boatright

Date: Wed, 8 May 2002 08:13:25 -0400
From: Tim ORourke <TORourke@KaiserFT.com>
To: "'qrp-l@Lehigh.EDU'" <qrp-l@Lehigh.EDU>
Subject: [126337] Re: QRP U.P.R.O.A.R. Project
Message-ID: <0514B74864ACD511934400508BBB5E3415F6F9@EMAIL1>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Try a Super K mart. I picked up several similar cases for \$15 each, look like same manufacturer. They are usuall offered around Christmas but I found them at a Super K last summer. I have used them for teloscope and photo cases also. There is a nicer type now comming in from China, I found a few nicer ones at local photo store and one that was perfect for K2 at a hobby store, it was intended for R/C trasnmitters. They ran up to abt \$50 for large size but much nicer and better mads, anodized in several colors also.
73 Tim KG4CHX

Date: Wed, 08 May 2002 08:34:37 -0400
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-l@lehigh.edu
Subject: [126338] Re: HB: A/D selection
Message-ID: <5.1.0.14.1.20020508080828.00a61b30@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 04:39 PM 5/7/2002 -0700, you wrote:

>I fancy using an analog to digital converter to monitor the AGC voltage in
>the IF amp of my computer QRP radio. (on topic, right??)

>

>I have no clue how to select an A/D converter ... I know I don't need but
>one channel for that, I know I don't need a million samples per second, but
>I don't know how to determine the sensitivity and accuracy, if ADC's are
>rated that way ...

>

>The voltage on an AGC line (Hayward, 'A progressive receiver,' late 80's
>early 90's handbooks ...) should be about .5 - 10 V shouldn't it? So I guess
>I'd need an A/D converter that can handle that range.

Tracy,

That's a start. You also need to decide how many bits you need. If you're satisfied with 255 steps between .5 and 10 volts, an 8-bit converter will do. If you need better resolution, look for a 10 (1024 steps) or 12 (4096 steps) converter. Or you can get more if you want to pay the price. Any voltage measurement is then taken as a fraction of the reference voltage - one bit in the output equals $1/255 * V_{ref}$ (for an 8-bit converter). For an 8-bit converter and a 10 volt reference, a reading of 105 $\approx$ 4.12 volts.

Some converters can handle bipolar (positive and negative) signals. It sounds like you can use a unipolar converter for this application. That helps with power supply complexity - you can get single voltage converters for that application. Otherwise you'll need a split supply.

Speaking of supplies, if you go with a 5-volt-only part, your input voltage may only go up to 5 volts as well. (Actually a little bit less.) You can scale the input voltage down with a simple voltage divider.

Decide on a sample rate. If you're making a virtual S-meter, something slow (10 to 100 samples per second) will probably do. If you're demodulating AM, you'll want something faster (Grin).

Think about how you'll interface it to your micro, too. You can get them in 8-pin packages with a clocked serial interface (I2C or similar) which are small but take a little more programming to control. Or you can get them with a data bus interface (data lines, chip select, etc.) that can hook to your micro's data bus. Then it's read like a peripheral chip.

Bear in mind - many converters today have a built in sample-and-hold circuit, so that when you begin a conversion (which takes some amount of time - hundreds of microseconds is not uncommon), it charges a cap to the input voltage then isolates it from the input to do its black magic. This periodic switching in-and-out of the cap causes a varying load than can introduce noise into the signal being measured. In your case, you may notice a popping or buzzing in the receiver audio as the gain gets "bumped" by the sampling on the AGC line. Consider a DC buffer between the actual AGC signal and the converter. A simple op amp stage with a gain of 1/2 would also provide the input scaling I mentioned earlier.

If you haven't already chosen a micro, consider getting one with the converter built in. PICs, AVRs, and a bazillion 68xx parts have converters that range from 8 to 12 bits. They tend to be unipolar 5-volt converters, and the on-chip noise usually makes them unsuitable for critical

measurements, but for basic display and control purposes they're pretty good and reasonably quick.

Probably more than you wanted to know, but I hope it helps.

Dave

"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Wed, 08 May 2002 08:39:01 -0400
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-1@lehigh.edu
Subject: [126339] Re: What NOT to buy at Dayton
Message-ID: <5.1.0.14.1.20020508083638.00a7b660@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 08:30 PM 5/7/2002 -0700, you wrote:
>P.S. Anyone remember a few years back when the
>Feds swept the Dayton swap and hauled all the
>pirate satellite dealers off to jail?

Dave,

No, but I remember standing there looking at some commercial VHF mobiles when a couple guys rounded the table, threw the seller up against his car, flashed a badge in his face, cuffed him and hauled him off.

I'm glad they did it BEFORE I bought one.

Dave

"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Wed, 08 May 2002 08:41:34 -0400
From: W2AGN <w2agn@w2agn.net>
To: Karl Kanalz <kkanalz@gcecis.com>,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [126340] Re: What's wrong with 950 mA on Receive?
Message-ID: <0205080841343S.04101@jsielke>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

On Wednesday 08 May 2002 05:31, Karl Kanalz wrote:

> Frank,
> I see nothing wrong with the Argonaut V receive power consumption.
> This is, after all, a "home station" rig and really isn't intended to be
> used
> in the field from battery power.
>
> Don't forget there is a complicated synthesizer and other power-hungry
> stuff in that box - not conducive to low power consumption. Look at the
> receive power consumption of other radios that are designed for home
> (base?) use - the ICOM 756 Pro, the Yaesu FT-1000D and so on.
>
> Karl K - W8TIF
> McKinney, Texas

--

Actually, it's not bad at all. The SG-2020 is supposed to be a "field" rig,
and it draws as much. Even the FT-817 draws around .750.

John L Sielke W2AGN
w2agn@w2agn.net
<http://www.w2agn.net>

Date: Wed, 8 May 2002 08:42:46 -0400
From: "ss lyon" <sslyon@megalink.net>
To: <w1rex@megalink.net>,

"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [126341] Re: LOBSTERCON 2002 July 6 and 7
Message-ID: <002d01c1f68d\$db1e4420\$5cc7e742@megalink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Rex, good to chat with you at HoseTraders.
Count me in for Lobstercon and I'll be there with ant. launching paraphernalia,
kite, and a tent if that's ok. Lobster will definitely go a long way to make up
for missing Atlanticon. Thanks for the effort, and let me know if I can help.
73
AA1MY

Seabury & Sharon Lyon
99 Sparrowhawk Mtn Rd
Bethel ME, 04217 U.S.A.
207-836-2576

Date: Wed, 8 May 2002 08:56:39 -0400
From: "Lee, Jimmy" <Jimmy.Lee@bartow.k12.ga.us>
To: <n9avg@att.net>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [126342] RE: New rig in town...soon...
Message-ID: <4B0AF71313064D4FA2B931AB5DEA3ADDD33F58@coexch2.bartow.k12.ga.us>
content-class: urn:content-classes:message
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

O no! Now we start a war about TT and K2. Why not give reasons for your
statement such as specs and your own experience instead of just saying
one is better.
Jim, AE4DT
=20

-----Original Message-----
From: Jeff Davis [mailto:n9avg@att.net]
Sent: Wednesday, May 08, 2002 4:05 AM
To: Low Power Amateur Radio Discussion
Subject: Re: New rig in town...soon...

Bill,

Perhaps ... but once you buy the new TT rig you will have a TT rig.

When you get done with the Elecraft adventure you have a K2!

Its like the difference between owning a really nice print or owning the masterpiece that inspired it.

;-)

72 de Jeff, N9AVG

----- Original Message -----

From: "Bill ROWLETT" <kc4atu@yahoo.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Tuesday, May 07, 2002 4:10 PM

Subject: Re: New rig in town...soon...

5. Same features on the K2 will run total over 1,000,
and you put it together.

Date: Wed, 8 May 2002 09:02:37 -0400

From: "Paul Christensen" <w9ac@arrl.net>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [126343] Re: What's wrong with 950 mA on Receive?

Message-ID: <005501c1f690\$a134cc40\$6401a8c0@attbi.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

I don't see the power consumption as an issue either. Actually, the rig fills a void somewhere between pure QRP and a replacement to the Scout. I like the fact that it will do 20-watts. It would be interesting to break down the power consumption by functional circuit area for this transceiver and its competitors like the SGC-2020, FT-817, and K2. Note that the new SGC-2020 with audio-derived DSP is priced equally with the new Ten-Tec at \$795.00 and the SGC does not offer QSK. For my backpacking and camping excursions, none of these radios will work for me. I much prefer the

ultra-simple single-band rigs the Norcal 40A or SST, SWL DSW-series or the Ten-Tec kit where power consumption on receive is always less than 35 mA and allows me to use a 2-AH gel-cell all weekend. My K1 gets close to this objective but its still not as enjoyable to use in the field as my SSTs.

While the K2 front-end specs are impressive, I suspect few portable operators are using Yagi stacks or other high-gain antennas where it makes any difference in the real world of portable or simple base operations. For such operations, I would much rather have a user-controlled 20dB RF pad and DSP filter with an excellent shape factor than a bullet-proof front end. By the way, Ten-Tec's published shape factor spec for any of its DSP filter settings is 1.5:1 or better. This is excellent and is commensurate with the commercial-grade RX-340 receiver. On the other hand, my RX-340 begins to introduce delay at the sharp filter bandwidths less than 500 Hz and makes QSK difficult at a setting of 300 Hz. More than anything, I am interested in knowing more about the 516's QSK performance when using the narrow receiver filters.

-Paul, W9AC

----- Original Message -----

From: "Karl Kanalz" <kkanalz@gcecispc.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, May 08, 2002 5:31 AM
Subject: What's wrong with 950 mA on Receive?

> Frank,
> I see nothing wrong with the Argonaut V receive power consumption.
> This is, after all, a "home station" rig and really isn't intended to be
> used
> in the field from battery power.
>
> Don't forget there is a complicated synthesizer and other power-hungry
> stuff in that box - not conducive to low power consumption. Look at the
> receive power consumption of other radios that are designed for home
> (base?) use - the ICOM 756 Pro, the Yaesu FT-1000D and so on.
>
> Karl K - W8TIF
> McKinney, Texas
>
> -----Original Message-----
> From: brickle
> Sent: Tuesday, May 07, 2002 9:47 PM
> To: Low Power Amateur Radio Discussion
> Subject: Re: Argonaut V alert!

>
> 950 mA on rx?!?
>
> 73
> Frank
> AB2KT
>
>

Date: Wed, 8 May 2002 08:26:04 -0400
From: "Jeff Davis" <n9avg@att.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [126344] Re: New rig in town...soon...
Message-ID: <004101c1f68b\$87a4dc20\$a5ed540c@c>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Sorry I hit the SEND button on this one. No flame wars desired by me.

The matter is closed, additional messages on this topic will be deleted by me so I hope this thread won't be perpetuated.

Mea Culpa and back to QRP.

73, Jeff N9AVG

----- Original Message -----
From: "Lee, Jimmy" <Jimmy.Lee@bartow.k12.ga.us>
To: <n9avg@att.net>; "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, May 08, 2002 8:56 AM
Subject: RE: New rig in town...soon...

O no! Now we start a war about TT and K2. Why not give reasons for your statement such as specs and your own experience instead of just saying one is better.
Jim, AE4DT

Date: Wed, 08 May 2002 09:30:41 -0400

From: geoff allsup <gallsup@whoi.edu>
To: tracy@bytemark.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [126345] Re: HB: A/D selection
Message-ID: <3CD92881.6B85939E@whoi.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Tracy Markham wrote:

>
> I fancy using an analog to digital converter to monitor the AGC voltage in
> the IF amp of my computer QRP radio. (on topic, right??)
>
> I have no clue how to select an A/D converter ... I know I don't need but
> one channel for that, I know I don't need a million samples per second, but
> I don't know how to determine the sensitivity and accuracy, if ADC's are
> rated that way ...
>
> The voltage on an AGC line (Hayward, 'A progressive receiver,' late 80's
> early 90's handbooks ...) should be about .5 - 10 V shouldn't it? So I guess
> I'd need an A/D converter that can handle that range.
>

Hi Tracy

I use MAX186 12-bit A/D converters in a number of places in my work where I need easy medium resolution A/D conversion. It's a self-contained serial access device with built in 8 input MUX. Does 0 - 4.095 volts (or bipolar +/- 2.047 V). Just put a 1% resistor divider in front for higher voltages. I'd be happy to send you some C code from my usage to give you an idea of how to talk to it. Real easy, works well, no hassle part...(not the worlds cheapest, though - Digikey stocks them, but you might be able to wangle a couple of "samples" direct from Maxim)

72,
geoff
-

Geoff Allsup, W10H gallsup@whoi.edu or w10h@arrl.net
Upper Ocean Processes Group
Woods Hole Oceanographic Institution Woods Hole, MA, USA

Date: Wed, 08 May 2002 10:02:43 -0400
From: "Craig A. Ferris" <cferris@aeronix.com>
To: qrp-1@Lehigh.EDU

Subject: [126346] Re: Rigs for sale
Message-ID: <3CD93003.5DF501D9@aeronix.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The 130V, OHR 20m, and SST are still available. New prices:

130V \$350 + shipping
OHR 20m \$45 + shipping
SST \$65 + shipping

72,
Craig

Date: Wed, 08 May 2002 09:56:24 -0400
From: W2AGN <w2agn@w2agn.net>
To: qrp-1@lehigh.edu
Subject: [126347] Current Draw
Message-ID: <0205080956243Y.04101@jsielke>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

I was incorrect on the current draw. The SG-2020 claims <400 ma on receive. I just checked mine (no ADSP), and it draws 550 ma @ 13.8 V.

The FT-817 claim 450 ma. Mine indicates 625 ma. If I shut off the LCD light, etc. I can get it down to 570 ma (@ 13.8 v). Checked with 2 different meters. (Rounded to nearest 5 ma).

So assuming claims are just that, the Argo V will probably draw > 1 A on receive. Not a "QRPTTF" rig, but good for home use.

--

John L Sielke W2AGN
 w2agn@w2agn.net
 http://www.w2agn.net

Date: Wed, 08 May 2002 09:58:48 -0400
From: W2AGN <w2agn@w2agn.net>

To: Jeff Davis <n9avg@att.net>,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [126348] Re: New rig in town...soon...
Message-ID: <0205080958483Z.04101@jsielke>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

On Wednesday 08 May 2002 08:26, Jeff Davis wrote:

> Sorry I hit the SEND button on this one. No flame wars desired by me.
>
> The matter is closed, additional messages on this topic will be deleted by
> me so I hope this thread won't be perpetuated.
>
> Mea Culpa and back to QRP.
>
> 73, Jeff N9AVG
>
--

The best solution is to have one of each ;-)

John L Sielke W2AGN
w2agn@w2agn.net
<http://www.w2agn.net>

Date: Wed, 8 May 2002 09:57:17 -0400
From: Dan Halbert <halbert@bbn.com>
To: qrp-l@lehigh.edu
Subject: [126349] Re: [126244] Having another look at the antenna situation...
Message-ID: <200205081357.g48DvHL11240@localhost.localdomain>

mcolvin says:

>As I went to take photos of my yard, I suddenly realized how small and
>forested" my yard really is. About the only space that isn't in the trees
>is the roof area of the house.
>...

I missed the earlier suggestions you got, but I may have a somewhat similar situation. I have a small one-story house, and a small lot (5700 sq ft) with many trees. Fortunately, the trees are taller than the house. So for me, the solution was to put up a horizontal loop that's suspended from trees and is above the roof.

The trees are not that tall so the loop is only about 8 feet above the roof. I was able to fit a 40m full-wave triangle in the space, fed with ladder line. If I had used a front-yard tree it could have been a better shape, but I was trying to make it relatively inconspicuous.

Dan, KB1RT

Date: Wed, 8 May 2002 10:03:04 -0400 (EDT)
From: "Scott Rosenfeld [N7JI]" <ham@w3eax.umd.edu>
To: Steven Weber <kd1jv@moose.ncia.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [126350] Leave late for best deals
Message-ID: <Pine.LNX.4.44.0205081002200.29914-1000000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I got a brand new 38 AH gel cell on Sunday afternoon once.

\$2.

Of course, I had to carry it about 1/2 mile...

Scott

On Tue, 7 May 2002, Steven Weber wrote:

> Rule of thumb for any flea market:
>
> Arrive early for best selection, leave late for best deals.
>
>
> 72,
> Steve, KD1JV
> "Melt Solder"
> White Mountains of New Hampshire
> <http://www.qsl.net/kd1jv/>
>

--

Scott Rosenfeld ARS N7JI
541-684-9970 Eugene, OR Land o' much rain
If you find me on the air, I'm probably in my car
ham@w3eax.umd.edu <http://w3eax.umd.edu/~ham>

Date: Wed, 08 May 2002 10:29:26 -0400
From: Ed Lawson <k1vp@grizzly.com>
To: w9ac@arrl.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [126351] Re: What's wrong with 950 mA on Receive?
Message-ID: <3CD93646.8050002@grizzly.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Paul Christensen wrote:

>For my backpacking and
>camping excursions, none of these radios will work for me. I much prefer the
ultra-simple single-band rigs the Norcal 40A or SST,
>SWL DSW-series
>

I am glad to see that someone else has the same feelings about rigs for
backpacking and day hike operations. First, I want a small, light, and
physically tough package. Second, I want a battery drain package,
Third, I want a simple, flexible, and easy to use package. Fourth, I
want a high performance package. In this scheme of things rigs such as
the SST, DSW, and Sierra have many advantages. Rigs that go on multiday
backpacking trips need to endure alot and keep on working.

Ed Lawson
K1VP

Date: Wed, 8 May 2002 10:25:21 -0400
From: "Ed Tanton" <n4xy@earthlink.net>
To: <alihernlem@hotmail.com>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [126352] RE: Diode Ring Mixer Level
Message-ID: <000301c1f69c\$300bb810\$c39efea9@n4xy>
MIME-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi Brad... what you'd be looking for would be distortion / overload
products of one form or another. I would start with as low a set of
input signal as possible, and see what results. One good guide would be

to look through various handbooks and look at their levels... if not listed, duplicate their circuits as closely as possible for your injection oscillator, and mixer. In a broad sense, think of 60dB attenuation as virtual non-existence. 30dB is pretty far down, and so on. The idea is to use the minimum level that produces a useable, undistorted output signal. If you lack the test equipment to SEE these signals, go ahead and build the detector/etc. and listen to the audio. Also keep in mind that impedance mismatches between such stages are VERY serious, so you need to use known-good circuit diagrams for your circuitry. Finally, use 1/8W resistors (preferably carbon film) for your attenuators-which may provide SOME protection for the circuits that follow. (Better to blow a resistor than a MOSFET.)

73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

Date: Wed, 8 May 2002 11:08:47 -0400
From: "Ronald A Pfeiffer" <Ronald_A_Pfeiffer@raytheon.com>
To: neqrp@jonal.net, qrp-1@Lehigh.EDU
Subject: [126353] Results NEQRP SSB NET
Message-ID: <0F194D7E29.4CE67CB1-0N85256BA5.004A13E0@and.us.ray.com>
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

Band was in great shape with some QRM'er at the end.

07:30PM EDST 8 checkins:

WA10HR	Ev	CT	IC756
KC1FB	Jim	CT	FT-7
AA1UE	Jerry	MA	SGC-2020

K1CL	Chuck	MA	FT-840
KD1JV	Steve	ME	PATCOMM 9000
N1XTK	Keith	CT	
AB8DF	Ed	MI	
WD1V	John	VA	K2

Thank you all for checking in and hope to hear you next week.

08:30PM EDST

AB8DF	ED	MI		
KC1FB	Jim	CT	QRP+	
K1CL	Chuck	MA	FT-840	

Again thank all that checked in, it is fun to see what 5 or 10 watts can do on SSB.

See you next week, Ron N1ZSW

Date: Wed, 08 May 2002 11:36:52 -0400
 From: "Randy Randall" <randallr@Healthall.com>
 To: <kc8aon@juno.com>, <qrp-1@Lehigh.EDU>
 Subject: [126354] Re: What NOT to buy at Dayton
 Message-ID: <scd90df5.023@healthall.com>
 Mime-Version: 1.0
 Content-Type: text/plain; charset=US-ASCII
 Content-Transfer-Encoding: quoted-printable
 Content-Disposition: inline

I purchased a Yaesu 474 in reasonably good (I thought) condition at a =
 local Cincinnati hamfest. The seller said that all was working and it had =
 full output. He also said he was willing to hook it up. It was starting =
 to rain and I got in a hurry. Was I sorry! Full output for 10 seconds at =
 a time. The insides were hacked! Always look inside. If the seller =
 will not let you pop the top, run away! Some may be reluctant to do this, =
 but if you are not just kicking the tires and are serious, a seller should =
 have nothing to hide. As for the seller of the radio with the brick =
 inside, be on the lookout for him this year and call the police. File a =
 report with the local PD. He will have to provide the cop with his name =
 and address. You might be able to sue him or at least get him thrown out =
 of the fest. I hope that the statute has not run out. I am on the lookout =
 for my seller.

Randy KB8AS0

=20

>>> Rick McKee <kc8aon@juno.com> 05/08/02 00:17 AM >>>
To All Dayton Patrons !

Taking the lid off the equipment you are interested in buying is very sound advice ! A friend of mine bought a very nice looking HF rig at Dayton a few years back for \$400, the thing looked pretty sharp and the seller swore that it worked top notch too. Well when he got it home and hooked it up it wouldn't even light up, so he took the lid off to see if he could find something obvious and sure enough he did ! the only thing that was left in the cabinet besides the boards that held the front and rear panel controls was a plain old brick ! Another friend of mine bought a Heathkit tuner (SA-2040 1.5kw) which is usually a very nice tuner except someone had robbed the original capacitors and installed ones that might have handled 25 watts at te most ! And recently at a local hamfest, I was looking at a tuner and asked the owner if I could pop the lid and take a look and he refused and got mad at me for asking.=20=

So I questioned him if it had ever been arched and he replied that it hadn't. So I stated that he shouldn't mind me taking a look inside and he still refused. So I walked away with my money still safely tucked away in my pocket. Another friend of mine bought a tuner at a hamfest and when he got it home he found that the swr meter circuit was missing - the meter was there but no circuit for it and the seller assured him that it all worked like new.

So, take a small set of screwdrivers, a small volt ohm meter, a small gel cell battery with clip leads, and a small flashlight ! You can't be too careful with all the thieves that hang out in these places these days !

Rick McKee, KC8AON
Willow Wood, Ohio
QRP - Do more with less !

GET INTERNET ACCESS FROM JUNO!

Juno offers FREE or PREMIUM Internet access for less!

Join Juno today! For your FREE software, visit:

<http://dl.www.juno.com/get/web/>.

Date: Wed, 08 May 2002 11:54:04 -0400

From: brickle <brickle@pobox.com>

To: qrp-1@lehigh.edu
Subject: [126355] Re: What's wrong with 950 mA on Receive?
Message-ID: <3CD94A1C.BE657A9D@pobox.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

> This is, after all, a "home station" rig and really isn't intended to be
> used
> in the field from battery power.

I think quite a few people were hoping otherwise.

73
Frank
AB2KT

Date: Wed, 8 May 2002 09:06:25 -0700
From: Mark Schoonover <schoon@amgt.com>
To: "'ham@w3eax.umd.edu'" <ham@w3eax.umd.edu>,
Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [126356] RE: Leave late for best deals
Message-ID: <BF889CEBEFD2D511B993009027F60ABE1556E7@AG-JASMINE-NT4>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

This is also known as the inverse distance price/mass ratio rule... The cheaper and heavier your item is, the farther away your vehicle will be parked.

72

.mark

> -----Original Message-----
> From: Scott Rosenfeld [N7JI] [mailto:ham@w3eax.umd.edu]
> Sent: Wednesday, May 08, 2002 7:03 AM
> To: Low Power Amateur Radio Discussion
> Subject: Leave late for best deals
>
>
> I got a brand new 38 AH gel cell on Sunday afternoon once.
>
> \$2.

>
> Of course, I had to carry it about 1/2 mile...
>
> Scott
>
> On Tue, 7 May 2002, Steven Weber wrote:
>
> > Rule of thumb for any flea market:
> >
> > Arrive early for best selection, leave late for best deals.
> >
> >
> > 72,
> > Steve, KD1JV
> > "Melt Solder"
> > White Mountains of New Hampshire
> > <http://www.qsl.net/kd1jv/>
> >
>
> --
> Scott Rosenfeld ARS N7JI
> 541-684-9970 Eugene, OR Land o' much rain
> If you find me on the air, I'm probably in my car
> ham@w3eax.umd.edu <http://w3eax.umd.edu/~ham>
>
>

Date: Wed, 8 May 2002 10:12:03 -0700
From: "Dave Fifield" <dave@redhotradio.com>
To: <w2agn@w2agn.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [126357] Re: What's wrong with 950 mA on Receive?
Message-ID: <002a01c1f6b3\$79a88270\$0200a8c0@AD6A>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

There must be something wrong with your FT-817
then John.....mine (2) only draw about 315mA on receive....

The FT-100 draws 1.2A on receive, so the new Agonaut V
is at about the right sort of level considering its complexity.

72, Dave, AD6A

----- Original Message -----

From: "W2AGN" <w2agn@w2agn.net>

Subject: Re: What's wrong with 950 mA on Receive?

(snip)

> Actually, it's not bad at all. The SG-2020 is supposed to be a "field" rig,

> and it draws as much. Even the FT-817 draws around .750.

Date: Wed, 8 May 2002 12:19:26 -0500

From: "James P. Osburn, P.E." <j.p.osburn@ieee.org>

To: "List; QRP, QRP Mailing List" <qrp-l@lehigh.edu>

Subject: [126358] Re: What NOT to buy at Dayton

Message-ID: <003401c1f6b4\$9ffeb2e0\$8689cccf@bbbcomputer>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

This year I'm not buying any FAR Circuits PCB's.

Not because I don't want to, but because he won't be there.

Takes a little fun out of the event. :-(

WD9EYB

Date: Wed, 08 May 2002 17:27:42 +0000

From: "Leon Heller" <leon_heller@hotmail.com>

To: tracy@bytemark.com, qrp-l@Lehigh.EDU

Subject: [126359] Re: HB: A/D selection

Message-ID: <F1510S6yDC0AHmKqyPm00010fe1@hotmail.com>

Mime-Version: 1.0

Content-Type: text/plain; format=flowed

>From: "Tracy Markham" <tracy@bytemark.com>

>Reply-To: tracy@bytemark.com

>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

>Subject: HB: A/D selection
>Date: Tue, 7 May 2002 16:39:37 -0700
>
>I fancy using an analog to digital converter to monitor the AGC voltage in
>the IF amp of my computer QRP radio. (on topic, right??)
>
>I have no clue how to select an A/D converter ... I know I don't need but
>one channel for that, I know I don't need a million samples per second, but
>I don't know how to determine the sensitivity and accuracy, if ADC's are
>rated that way ...
>
>The voltage on an AGC line (Hayward, 'A progressive receiver,' late 80's
>early 90's handbooks ...) should be about .5 - 10 V shouldn't it? So I
>guess
>I'd need an A/D converter that can handle that range.
>
>Am I barking up the right tree?
>Tracy N4LGH
>
>

Have a look at the TI TLC549. It's very easy to interface to any
micro-controller (clocked serial I/F).

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

My low-cost Altera Flex design kit: <http://www.leonheller.com>

Join the world s largest e-mail service with MSN Hotmail.
<http://www.hotmail.com>

Date: Wed, 8 May 2002 10:27:34 -0700
From: "Tracy Markham" <tracy@bytemark.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [126360] RE: HB: A/D selection
Message-ID: <NFBKLDHALEHCJMAJPKFOECIDBAA.tracy@bytemark.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Thank all of you for so many good suggestions. I'm learning a lot - I had been looking through the data sheets for ADCs and just had been overwhelmed ...

Some of the disqualifiers I picked up on narrowed the search a lot - I wanted parallel out, and a DIP package for easy building. THAT narrowed the field greatly.

8 bit resolution seems fine. 255 steps for about 10v ... that's about 25 steps / volt? I'm leaning toward the ADC0803LCN-ND, looks like that should fit the bill. I'll report when I figure it out!

The point about voltage spikes in the sample line and buffering is well taken. The IF amp is great - it makes the best sound from any receiver *I've* ever built. Any op amp? I have some LM627C low noise op amps. I think they've been discontinued, but they're good and I have a lot of them :)

I'll be interfacing the output to an 8255a PPI I built. It's basically a homebrew trainer, but it will end up being a radio when it's done. I'll probably also build one on an ISA card too just to play with it.

Again, thanks for all the good info!
Tracy N4LGH

Date: Wed, 8 May 2002 12:39:32 -0500
From: "Harold Smith" <harold.smith1@worldnet.att.net>
To: <j.p.osburn@ieee.org>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [126361] Re: What NOT to buy at Dayton
Message-ID: <001201c1f6b7\$514355e0\$e609550c@tinker>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Bummer...

I always made a point of buying at least one board from him, just to make sure I had a project.

> This year I'm not buying any FAR Circuits PCB's.
> Not because I don't want to, but because he won't be there.
> Takes a little fun out of the event. :-(
>

> WD9EYB

>

>

>

Date: Wed, 08 May 2002 14:24:25 -0400
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-1@lehigh.edu
Subject: [126362] RE: HB: A/D selection
Message-ID: <5.1.0.14.1.20020508141617.00a7ca10@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 10:27 AM 5/8/2002 -0700, you wrote:

>8 bit resolution seems fine. 255 steps for about 10v ... that's about 25
>steps / volt? I'm leaning toward the ADC0803LCN-ND, looks like that should
>fit the bill. I'll report when I figure it out!

Tracy,

From a quick look at the online data sheet it looks like a good choice. It has a 100 us conversion time, which ain't bad for an inexpensive converter. It says there's no sample-and-hold, so the sampling noise I mentioned earlier may not be as bad. HOWEVER - a signal that's varying during the conversion process -will- cause some error. Since AGC doesn't usually vary that fast (100 us = 10 kHz), and since you've already decided that 8 bits is enough, it shouldn't be a problem.

>The point about voltage spikes in the sample line and buffering is well
>taken. The IF amp is great - it makes the best sound from any receiver
>*I've* ever built. Any op amp? I have some LM627C low noise op amps. I think
>they've been discontinued, but they're good and I have a lot of them :)

Just about any op amp - even the LM324 - would do. It's a DC application, and even moderate voltage offsets aren't going to contribute much error.

>I'll be interfacing the output to an 8255a PPI I built. It's basically a
>homebrew trainer, but it will end up being a radio when it's done. I'll
>probably also build one on an ISA card too just to play with it.

I'd love to see what you come up with. Especially the IF strip if it's as nice as you claim.

Dave

"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Wed, 08 May 2002 14:24:19 -0400
From: "Charles Mabbott" <aa8vs@msn.com>
To: dave@redhotradio.com, qrp-1@Lehigh.EDU
Subject: [126363] Re: What's wrong with 950 mA on Receive?
Message-ID: <F36LqTieBMeh4Bc8Msa0001a347@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

SG 2020 draws up to 400 ma on RX. To minimize turn off the lighted display also. The 950 for the 817 does sound high to me, is there a method to turn off unneeded functions?

73 oo
Chuck AA8VS

>From: "Dave Fifield" <dave@redhotradio.com>
>Reply-To: dave@redhotradio.com
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Re: What's wrong with 950 mA on Receive?
>Date: Wed, 8 May 2002 10:12:03 -0700

Join the world s largest e-mail service with MSN Hotmail.
<http://www.hotmail.com>

Date: Wed, 08 May 2002 14:34:25 -0400
From: "Charles Mabbott" <aa8vs@msn.com>
To: kkanalz@gcecisp.com, qrp-1@Lehigh.EDU
Subject: [126364] Re: What's wrong with 950 mA on Receive?
Message-ID: <F3prvUtNTm21fUDAFeu0001b414@hotmail.com>

Mime-Version: 1.0

Content-Type: text/plain; format=flowed

In all fairness, I really enjoy my SG 2020. Would I want to throw it in a back pack and trundle up and down some hills. Nope! Would I want to do that with the 817 or K2, probably not for similar reasons. Current draw size accessories, etc. Then one of the small mono band rigs, TT, SWXX, DSW, or a K1.

Would I want to head for a park [driving and or flying] and work some stations? I see the K2, SG 2020, K1, or FT817 as a good choice. I have on vacations to condo taken my TS 520 and had Rx current up the yink by comparision but did not have to worry about batteries.

So before we get started to far, I like [IMHO] to qualify what I am going to do with the rig and what the expectations are. This seems only fair to me. There are alot of rigs out there, some better than others no doubt but all the choices makes the horserace fun right.

73 oo

Chuck AA8VS

>From: "Karl Kanalz" <kkanalz@gcecispc.com>

>Reply-To: kkanalz@gcecispc.com

>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

>Subject: What's wrong with 950 mA on Receive?

>Date: Wed, 8 May 2002 04:31:14 -0500

>

>Frank,

>I see nothing wrong with the Argonaut V receive power consumption.

>This is, after all, a "home station" rig and really isn't intended to

<snip>

MSN Photos is the easiest way to share and print your photos:

<http://photos.msn.com/support/worldwide.aspx>

Date: Wed, 8 May 2002 14:14:55 -0400

From: "Mike Yetsko" <myetsko@insydesw.com>

To: <tracy@bytemark.com>,

"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [126365] Re: HB: A/D selection

Message-ID: <009a01c1f6bc\$447b4b60\$0200a8c0@charter.net>

MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

If you're going to go 0803, consider the 0808 or 0809. They are available for just over a buck last time I bought some. 8-bit and easy to program...

And who knows what those 'extra' inputs might find a use for!

Mike

----- Original Message -----

From: "Tracy Markham" <tracy@bytemark.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, May 08, 2002 1:27 PM
Subject: RE: HB: A/D selection

> Thank all of you for so many good suggestions. I'm learning a lot - I
had
> been looking through the data sheets for ADCs and just had been
overwhelmed
> ...
>
> Some of the disqualifiers I picked up on narrowed the search a lot - I
> wanted parallel out, and a DIP package for easy building. THAT narrowed
the
> field greatly.
>
> 8 bit resolution seems fine. 255 steps for about 10v ... that's about 25
> steps / volt? I'm leaning toward the ADC0803LCN-ND, looks like that
should
> fit the bill. I'll report when I figure it out!
>
> The point about voltage spikes in the sample line and buffering is well
> taken. The IF amp is great - it makes the best sound from any receiver
> *I've* ever built. Any op amp? I have some LM627C low noise op amps. I
think
> they've been discontinued, but they're good and I have a lot of them :)
>
> I'll be interfacing the output to an 8255a PPI I built. It's basically a
> homebrew trainer, but it will end up being a radio when it's done. I'll
> probably also build one on an ISA card too just to play with it.
>
> Again, thanks for all the good info!
> Tracy N4LGH

>
>
>

End of QRP-L Digest 2549

